

# Examined Notes

1	5	10	15
Gln Arg Glu Tyr Leu Leu Asn Leu Phe Arg Glu Arg Gly Val Gln Tyr			
20	25	30	
Leu Val Gly Ala Gly Asp Gly Ala Glu Ala Leu Arg Cys Leu Lys Gln			
35	40	45	
Asp Arg Phe Asp Leu Ile Leu Ser Asp Leu Met Met Pro Gly Met Asp			
50	55	60	
Gly Ile Gln Met Ile Leu Gln Leu Pro Tyr Leu Lys His Arg Pro Lys			
65	70	75	80
Leu Ala Leu Met Ser Ser Ser Ser Gln Arg Met Met Leu Ser Ala Ser			
85	90	95	
Arg Val Ala Gln Ser Ser Leu Gly Leu Ser Val Ile Asp Leu Leu Pro Lys			
100	105	110	
Pro Thr Leu Pro Lys Ala Ile Gly Gln Leu Leu Glu His Leu Glu Arg			
115	120	125	
Cys Leu Arg Gln Lys Leu Glu Pro Glu Thr Asp Glu Thr Pro His Gly			
130	135	140	
Arg Thr Ala Leu Leu Asp Ala Leu His Asn Glu Gln Leu Val Thr Trp			
145	150	155	160
Phe Gln Ala Lys Lys Ser Leu His Thr Gly Arg Ile Val Gly Ala Glu			
165	170	175	
Ala Leu Ile Arg Trp Ser His Pro Gln His Gly Leu Leu Leu Pro Ser			
180	185	190	
Cys Phe Met Ser Asp Val Asp Ala Thr Gly Leu His Glu Ala Leu Leu			
195	200	205	
Trp Arg Val Leu Glu Gln Thr Leu Asn Ala Gln Glu Ser Trp Arg Arg			
210	215	220	
Ala Gly Tyr Glu Ile Pro Val Ser Val Asn Leu Pro Pro His Leu Leu			
225	230	235	240
Asp Asn Gln Glu Leu Pro Asp Arg Leu Tyr Glu Tyr Val Gly Ala Arg			
245	250	255	
Gly Ala Cys Thr Ser Ser Leu Cys Phe Glu Leu Thr Glu Ser Ser Val			
260	265	270	
Thr Thr Leu Ser Ser Asn Tyr Tyr Ala Gly Ala Cys Arg Leu Arg Met			
275	280	285	
Lys Gly Phe Gly Leu Ala Gln Asp Asp Phe Gly Gln Gly Tyr Ser Ser			
290	295	300	
Phe Tyr Asn Leu Val Thr Thr Pro Phe Thr Glu Leu Lys Ile Asp Arg			
305	310	315	320
Ser Leu Val Gln Gly Cys Val Glu Asp Asn Gly Leu Asn Ala Ala Val			
325	330	335	
Ile Ser Cys Ile Glu Leu Gly His Arg Leu Asn Leu Asp Val Val Ala			
340	345	350	
Glu Gly Val Glu Thr Cys Glu Glu Leu Asn Leu Leu Arg Arg Leu Gly			
355	360	365	
Cys Asp Arg Ala Gln Gly Phe Leu Ile Ser Lys Ala Val Ser Ala Arg			
370	375	380	
Glu Phe Glu Arg Gln Leu Arg Glu Asp Gly Pro Ser Leu Leu Val			
385	390	395	

<210> 141  
 <211> 1084  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 141

Val Lys Ser Ala Ser Ala Leu Glu His Asp Asn Lys Leu Leu Leu Lys
1 5 10 15

NO motif

Trp Thr Thr Leu Ser Gln Ser Leu Ser Ile (Gly) Leu Ile Cys Val Val  
 20 25 30  
 Val Leu Thr Val Leu Leu Phe Ser Ile Cys Tyr Trp Ser Leu (Gly) Arg  
 35 40 45  
 Leu Phe Gln Glu Glu Glu Asp Lys Val Ser Phe His Phe Thr Arg Met  
 50 55 60  
 Met Asp Val Ile Arg Glu His Glu Val Phe Leu (Gly) Arg Ile Ala Arg  
 65 70 75 80  
 Lys Ser Asp Lys Thr Gln Lys Tyr Asp Tyr Asp Val Val Pro Leu  
 85 90 95  
 Gln Arg His Leu Leu Ala Lys Glu Asn (Gly) Leu Ala Val Tyr Glu (Gly)  
 100 105 110  
 Arg Glu Phe Ser Phe Ala Met Pro Phe Leu Leu Ala Thr Lys His Ala  
 115 120 125  
 Leu Ser Ala Asp Ser Ser (Gly) Asp Pro Phe Ser Leu (Gly) Val Leu Leu  
 130 135 140  
 Ala Asn Phe Tyr (Gly) Ser Phe Trp Ser Val Ser Ala Tyr Pro Ala Pro  
 145 150 155 160  
 Gln Leu Leu Ile Phe Asp Leu Ser (Gly) Ser Thr Arg Leu Ala Val Pro  
 165 170 175  
 Ser Ile Pro Ser Thr Ala Gln Arg Asp Arg Leu Ser (Gly) Ser Tyr Pro  
 180 185 190  
 Met Ile Val Glu Arg Ile Leu Ala Arg Leu Arg Thr Arg Pro Val (Gly)  
 195 200 205  
 Glu Asp Ala Gln Arg Val His Trp Ile Arg Ala Asp Arg Tyr Arg Asp  
 210 215 220  
 Ser Ala Leu Glu Met Leu (Gly) Val Ala Arg Val Asp Leu Pro Glu Thr  
 225 230 235 240  
 Leu Trp Trp His Asp Glu Pro Asn His Leu Ile Ile Ala Ala Ser Leu  
 245 250 255  
 Leu Asp Leu Arg Arg Ile Asn Asp Phe Glu Gln Leu Val Glu Arg Pro  
 260 265 270  
 Ala Phe Asp Ser Tyr Ser Leu Val Ser Pro Asp (Gly) Glu Val Leu Leu  
 275 280 285  
 (Gly) Ala Ala Pro Ala Thr (Gly) Leu Arg Asp (Gly) Leu Asn Leu Thr Arg  
 290 295 300  
 Gln (Gly) Val Ala Val Gln Leu Leu Ser Gln Pro Glu Asn (Gly) Trp Leu  
 305 310 315 320  
 Ala Val Tyr Arg Thr Asp Tyr (Gly) Asn Phe Phe Arg His Ser Arg Trp  
 325 330 335  
 Leu Val Ala (Gly) Leu Leu Leu Thr Pro Ala Leu Leu Leu Ala (Gly) Trp  
 340 345 350  
 Leu (Gly) Met Arg Trp Tyr Thr Ser Ser Val Val Asn Pro Val His Arg  
 355 360 365  
 Ala His Arg Gln Leu Val Glu Ser Asp Thr Phe Ser Arg Thr Leu Ile  
 370 375 380  
 Gln Thr Ala Pro Val Ala Leu Val Val Leu Thr Gln Asp Asp Gln Gln  
 385 390 395 400  
 Leu Val Thr Cys Asn His Leu Ala Ala Gln Trp Leu Gly (Gly) Pro Thr  
 405 410 415  
 Glu Ile Leu (Gly) Leu Thr Ser Asn Trp Lys Leu Phe Asp Ala Arg (Gly)  
 420 425 430  
 Gln Val Pro (Gly) Asp Ile Cys Ile Gln Val Gly (Gly) Arg Tyr Leu Gln  
 435 440 445  
 Thr Ala Phe Ala Ala Thr Arg Tyr Ala (Gly) Thr Glu Ala Val Leu Cys  
 450 455 460  
 Val Phe Asn Asp Ile Thr Val His Cys Glu Ala Glu Thr Ala Leu Ser  
 465 470 475 480  
 Asn Ala Lys Arg Ala Ala Asp Ala Ala Ser Gln Ala Lys Thr Leu Phe

Leu	Ala	Arg	Met	485	Ser	His	Glu	Ile	Arg	490	Thr	Pro	Leu	Tyr	495	Gly	Val	Leu
			500						505						510			
Gly	Thr	Leu	Glu	Leu	Leu	Asp	Leu	Thr	Thr	Leu	Asn	Glu	Arg	Gln	Arg			
	515						520						525					
Ala	Tyr	Leu	Arg	Thr	Ile	Gln	Ser	Ser	Ser	Ala	Thr	Leu	Met	Gln	Leu			
	530					535					540							
Ile	Ser	Asp	Val	Leu	Asp	Val	Ser	Lys	Ile	Glu	Ala	Gly	Gln	Met	Ala			
545					550					555				560				
Leu	Thr	Leu	Ala	Ala	Phe	Asn	Pro	Leu	Asp	Leu	Val	Arg	Glu	Val	Leu			
			565						570					575				
Gly	Asn	Phe	Ala	Ala	Ser	Ala	Met	Ala	Lys	Asp	Leu	Gln	Phe	Tyr	Ala			
	580							585					590					
Cys	Ile	Asp	Thr	Glu	Val	Pro	Ala	Gln	Leu	Ile	Gly	Asp	Val	Thr	Arg			
	595					600				605								
Ile	Arg	Gln	Val	Leu	Asn	Asn	Leu	Val	Asn	Asn	Ala	Leu	Lys	Phe	Thr			
610						615					620							
Asp	Ile	Gly	Arg	Val	Val	Leu	Arg	Val	Lys	Leu	Leu	Ser	Arg	Asn	Asp			
625					630					635					640			
Gly	Arg	Ala	Leu	Leu	Gln	Trp	Gln	Val	Ala	Asp	Thr	Gly	Ile	Gly	Ile			
	645								650					655				
Ala	His	Glu	Gln	Glu	Arg	Leu	Phe	Glu	Ala	Phe	Tyr	Gln	Val	Ser				
	660							665					670					
Gly	Ala	His	His	Ala	Gly	Gly	Thr	Gly	Leu	Gly	Leu	Ser	Ile	Cys	Trp			
	675				680							685						
His	Leu	Ala	Glu	Met	Met	Gly	Gly	His	Leu	Arg	Met	Val	Ser	Glu	Thr			
690					695					700								
Gly	Leu	Gly	Ser	Ser	Phe	Ser	Leu	Val	Leu	Glu	Leu	Pro	Glu	Asp	Glu			
705					710					715								
Gln	Ser	Gly	Leu	Ala	Cys	Arg	Pro	Gly	Leu	Leu	Lys	Ser	Ala	Cys	Val			
	725							730						735				
His	Val	Arg	Ser	Pro	Val	Arg	Glu	Leu	Ala	Asp	Ser	Val	Gly	Ala	Trp			
	740							745					750					
Leu	Lys	Ala	Trp	Gly	Cys	Lys	Val	Ser	Ser	Gly	Glu	Ala	Ala	Pro	Ser			
	755					760					765							
Glu	Leu	Glu	Thr	Cys	Val	Leu	Leu	Glu	Leu	Leu	Pro	Met	Ala	Ala	Gly			
	770					775					780							
Pro	Ala	Ser	Ser	Pro	Trp	Pro	Gly	Pro	Arg	Val	Arg	Ala	Ser	Met	Asp			
785					790					795					800			
Ala	Pro	Cys	Gln	Pro	Glu	Leu	Arg	Glu	Asp	Gly	Trp	Arg	Val	Gly	Leu			
	805								810					815				
His	Asn	Leu	Ala	Gly	Ile	Gly	Gln	Ala	Leu	Ala	Gln	Ala	Leu	Gly	Gly			
	820							825					830					
Asp	Ile	Pro	Glu	Gln	Thr	Pro	Ala	Asn	Ala	Cys	Ala	Arg	Ser	Gly	Arg			
	835					840						845						
Leu	Asp	Leu	Glu	Val	Leu	Val	Ala	Glu	Asp	Asn	Pro	Val	Asn	Gln	Ala			
	850					855					860							
Leu	Leu	Arg	Glu	Gln	Leu	Glu	Glu	Leu	Gly	Cys	Arg	Val	Ser	Leu	Ala			
865					870					875					880			
Gly	Asp	Gly	Arg	Gln	Ala	Leu	Gln	Leu	Phe	Asp	Ser	Gly	Arg	Phe	Asp			
	885								890					895				
Leu	Leu	Leu	Ser	Asp	Val	Asn	Met	Pro	Asn	Met	Thr	Gly	Tyr	Glu	Leu			
	900							905					910					
Thr	Gln	Ala	Leu	Arg	Glu	Arg	Gly	Glu	Thr	Leu	Pro	Ile	Ile	Gly	Val			
	915					920						925						
Thr	Ala	Asn	Ala	Leu	Arg	Glu	Gly	Glu	Arg	Cys	Arg	Ala	Val	Gly				
	930					935				940								
Met	Asn	Ser	Trp	Leu	Val	Lys	Pro	Ile	Thr	Leu	His	Thr	Leu	His	Glu			
945					950					955					960			

*Backs  
Curing  
orientation*

*backwards*

Leu Leu Ser Glu Phe Ala Arg Ala Gly Val Val Leu Pro Ala Gln Ala  
 965 970 975  
 Arg Asp Leu Gly Pro Pro Ala Gln Leu Asp Asp Gly Leu Ser Pro Gln  
 980 985 990  
 Val Pro Glu Arg Met Arg Ala Leu Phe Leu Glu Thr Met Gly Lys Asp  
 995 1000 1005  
 Leu Glu Ala Ala Arg Gln Ala Ile Arg Arg Asn Asp Pro Lys Gly Leu  
 1010 1015 1020  
 Gln Gln Asp Leu His Arg Met Ala Gly Ser Leu Ala Val Met Arg Ala  
 1025 1030 1035 1040  
 Arg Thr Leu Val Val Met Cys Gln Gly Ala Glu Glu Gly Leu Leu Glu  
 1045 1050 1055  
 Ser Arg Leu Glu Cys Ser Ala Val Glu Ile Gly Glu Val Leu Val His  
 1060 1065 1070  
 Ile Glu Gln Ala Leu Glu Phe Val Arg Lys Thr Gly  
 1075 1080

<210> 142  
 <211> 231  
 <212> PRT  
 <213> Pseudomonas aeruginosa

<400> 142  
 Met Arg Pro Gly Ser Ile Val Gly Ile Arg Thr Gln Glu Lys Pro Met  
 1 5 10 15  
 Ser Lys Leu Lys Ile Val Leu Ala Asp Asp His Pro Ile Val Arg Met  
 20 25 30  
 Gly Val Cys Asp Met Leu Glu Arg Asp Gly Arg Phe Glu Val Val Gly  
 35 40 45  
 Glu Ala Ser Thr Pro Ser Glu Leu Val Glu Val Cys Arg Gln Ser Glu  
 50 55 60  
 Pro His Ile Ala Ile Thr Asp Tyr Ser Met Pro Gly Asp Glu Arg Tyr  
 65 70 75 80  
 Gly Asp Gly Leu Lys Leu Ile Asp Tyr Leu Leu Arg Asn Phe Pro Arg  
 85 90 95  
 Thr Lys Val Leu Ile Phe Thr Met Val Gly Asn Arg Leu Ile Leu Asp  
 100 105 110  
 Ser Leu Tyr Asp His Gly Val Ser Gly Val Val Leu Lys Ser Gly Glu  
 115 120 125  
 Leu Asp Glu Leu Leu Leu Ala Leu Asp Val Val Lys Gln Asn Arg Val  
 130 135 140  
 Tyr Arg Gly Ala Asn Met Leu Asp Pro Thr Ser Val Leu Ala Asn Arg  
 145 150 155 160  
 Asp Glu Val Glu Ser Arg Phe Ala Arg Leu Ser Met Lys Glu Phe Glu  
 165 170 175  
 Val Leu Arg His Phe Val Ser Gly Ser Asn Val Cys Asp Ile Ala Arg  
 180 185 190  
 Leu Leu Lys Arg Ser Val Lys Thr Val Ser Thr Gln Lys Val Ser Ala  
 195 200 205  
 Met Arg Lys Leu Glu Val Asn Ser Asp Gln Ala Leu Met Thr Phe Cys  
 210 215 220  
 Val His Ala Asn Leu Phe His  
 225 230

<210> 143  
 <211> 238  
 <212> PRT